IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application. An identifier indicating the status of each claim is provided.

Listing of Claims

1. (Currently Amended) An information management system comprising:

a center processing apparatus for performing user-information analysis; and

a plurality of information processing apparatuses for storing user information;

wherein:

said center processing apparatus comprises:

acquiring means for acquiring user information collected from each of the information processing apparatuses, the user information including operation information from a user for setting parameters for resolution and noise suppression;

analyzing means for analyzing the operation information that reflects new products and new functions and obtaining user preference information indicating the new products and the new functions that the user prefers;

user-information recording means for recording, in a database, user preference information obtained by the analysis by said analyzing means;

selecting means for selecting, based on the user preference information obtained by the analysis by said analyzing means, optimal procedures about image quality and sound quality for users of the information processing apparatuses;

providing means for providing the users with the new product or a circuit board having the new function of the optimal procedures about image quality and sound quality

selected by said selecting means to update an existing product or circuit board having a corresponding function; and

each of said information processing apparatuses comprises:

operation-information accepting means for accepting operation information from the user;

signal processing means for processing an input signal, based on the operation information accepted by said operation-information accepting means; and

storage means for storing, as the user information, the operation information and information concerning the input signal.

2. (Currently Amended) An information processing method for an information management system comprising a center processing apparatus for performing user-information analysis and a plurality of information processing apparatuses for storing user information, wherein:

a center processing method for said center processing apparatus comprises:

an acquiring step for acquiring user information collected from each of the information processing apparatuses, the user information including operation information from a user for setting parameters for resolution and noise suppression;

an analyzing step for analyzing the operation information that reflects new products and new functions and obtaining user preference information indicating the new products and the new functions that the user prefers;

a user-information recording step for recording, in a database, user preference information obtained by the analysis in the analyzing step;

a selecting step for selecting optimal procedures about image quality and sound quality for users of the information processing apparatuses, based on the user preference information obtained by the analysis in the analyzing step;

a provision step for providing the users with the new product or a circuit board having the new function of the optimal procedures about image quality and sound quality selected in the selecting step to update an existing product or circuit board having a corresponding function; and

an information processing method for each of the information processing apparatuses comprises:

an operation-information accepting step for accepting operation information from the user;

a signal processing step for processing an input signal, based on the operation information accepted in the operation-information accepting step; and

a storage step for storing, as the user information, the operation information and information concerning the input signal.

3. (Currently Amended) A center processing apparatus for processing user information from a plurality of information processing apparatuses, said center processing apparatus comprising:

acquiring means for acquiring user information collected from each of the information processing apparatuses, the user information including operation information from a user for setting parameters for resolution and noise suppression;

analyzing means for analyzing the operation information that reflects new products and new functions and obtaining user preference information indicating the new products and the new functions that the user prefers;

user-information recording means for recording, in a database, user preference information obtained by the analysis by said analyzing means;

selecting means for selecting, based on the user preference information obtained by the analysis by said analyzing means, optimal procedures about image quality and sound quality for users of the information processing apparatuses; and

providing means for providing the users the new product or a circuit board having the new function of with the optimal procedures about image quality and sound quality selected by said selecting means to update an existing product or circuit board having a corresponding function.

4. (Original) A center processing apparatus according to claim 3, wherein said selecting means includes determining means which calculates a variation in the user information and which determines whether or not the variation is greater than a predetermined threshold, and said selecting means classifies the users into predetermined groups based on the result of determination by said determining means.

5. (Original) A center processing apparatus according to claim 4, further comprising procedure recording means in which the optimal procedures are recorded so as to differ depending on the predetermined groups.

6. (Original) A center processing apparatus according to claim 4, wherein said providing means includes:

basic part determining means which, based on the result of determination by said determining means, acquires one procedure from said procedure recording means, and which, based on the acquired procedure, determines a basic part of a function to be provided to the user; and

unique part determining means which, based on the user information analyzed by said analyzing means, determines a part unique to the user in the function.

7. (Original) A center processing apparatus according to claim 4, further comprising updating means which, based on the user information recorded by said user-information recording means, updates the threshold in said determining means.

8. (Currently Amended) An information processing method for a center processing apparatus for processing user information from a plurality of information processing apparatuses, said information processing method comprising:

an acquiring step for acquiring user information collected from each of the information processing apparatuses, the user information including operation information from a user for setting parameters for resolution and noise suppression;

an analyzing step for analyzing the operation information that reflects new products and new functions and obtaining user preference information indicating the new products and the new functions that the user prefers;

a user-information recording step for recording, in a database, user preference information obtained by the analysis in the analyzing step;

a selecting step for selecting, based on the user preference information obtained by the analysis in the analyzing step, optimal procedures about image quality and sound quality for users of the information processing apparatuses; and

a providing step for providing the users the new product or a circuit board having the new function of with the optimal procedures about image quality and sound quality selected in the selecting step to update an existing product or circuit board having a corresponding function.

9. (Currently Amended) A computer-readable medium for storing program code executed by a processing apparatus for processing user information from a plurality of information processing apparatuses, said program comprising:

an acquisition control step for controlling acquisition of user information collected from each of the information processing apparatuses, the user information including operation information from a user for setting parameters for resolution and noise suppression;

an analysis control step for controlling analysis on the operation information that reflects new products and new functions and obtaining user preference information indicating the new products and the new functions that the user prefers;

a user-information recording step for recording, in a database, user preference information obtained by the analysis in the analysis control step;

a selection-control step for controlling, based on the user preference information obtained by the analysis in the analysis control step, selection of optimal procedures about image quality and sound quality for users of the information processing apparatuses; and

a provision-control step for controlling provision of a product or a circuit board having a function of the optimal procedures about image quality and sound quality selected in the selection-control step to the users to update an existing product or circuit board having a corresponding function.

10. (Currently Amended) A recording medium with a program for a center processing apparatus recorded thereon, the center processing apparatus processing user information from a plurality of information processing apparatuses, said program comprising:

an acquisition control step for controlling acquisition of user information collected from each of the information processing apparatuses, the user information including operation information from a user for setting parameters for resolution and noise suppression;

an analysis control step for controlling analysis on the operation information that reflects new products and new functions and obtaining user preference information indicating the new products and the new functions that the user prefers;

a user-information recording step for recording, in a database, user preference information obtained by the analysis in the analysis control step;

a selection-control step for controlling, based on the user preference information obtained by the analysis in the analysis control step, selection of optimal procedures about image quality and sound quality for users of the information processing apparatuses; and

a provision-control step for controlling provision of the new product or a circuit board having the new function of the optimal procedures about image quality and sound quality selected in the selection-control step to the users to update an existing product or circuit board having a corresponding function.

11. (Currently Amended) An information processing apparatus comprising:

operation-information accepting means for accepting operation information from a user for setting parameters for resolution and noise suppression, the operation information reflecting new products and new functions which the user prefers;

signal-processing means for processing an input signal in accordance with the new product or a circuit board having the new function of an optimal procedure about image quality and sound quality, which updates an existing product or circuit board having a corresponding function; and

storage means for storing, as user preference information to be provided to a provider of said information processing apparatus, the operation information and information concerning the input signal,

wherein the optimal procedure about image quality and sound quality is determined based on the user preference information.

12. (Original) An information processing apparatus according to claim 11, wherein said storage means stores, as the operation information, the value of a parameter set by the user and a time that the parameter is set by the user.

13. (Original) An information processing apparatus according to claim 11, wherein said signal processing means performs an image creating process by performing classification adaptive processing on an input information signal.

14. (Original) An information processing apparatus according to claim 11, wherein said signal processing means is removable from said information processing apparatus.

15. (Currently Amended) An information processing method comprising:

an operation-information accepting step for accepting operation information from a user for setting parameters for resolution and noise suppression, the operation information reflecting new products and new functions which the user prefers;

a signal processing step for performing, on an input signal, processing based on the operation information accepted in the operation-information accepting step in accordance with the new product or a circuit board having the new function of an optimal procedure about image quality and sound quality, which updates an existing product or circuit board having a corresponding function; and

a storage step for storing, as user preference information to be provided to a provider of said information processing apparatus, the operation information and information concerning the input signal,

wherein the optimal procedure about image quality and sound quality is determined based on the user preference information.

16. (Currently Amended) A computer-readable medium for storing a program executed by a computer, the program comprising:

an operation-information-acceptance control step for controlling reception of operation information from a user for setting parameters for resolution and noise suppression, the operation information reflecting new products and new functions which the user prefers;

a signal-processing control step for controlling, based on the operation information accepted in the operation-information-acceptance control step, processing on an input signal in accordance with the new product or a circuit board having the new function of an optimal procedure about image quality and sound quality, which updates an existing product or circuit board having a corresponding function; and

a storage control step for storing, as user preference information to be provided to a provider of an information processing apparatus, the operation information and information concerning the input signal

wherein the optimal procedure about image quality and sound quality is determined based on the user preference information.

17. (Currently Amended) A recording medium with a program recorded thereon, the program being executed by a computer, the program comprising:

an operation-information-acceptance control step for controlling reception of operation information from a user for setting parameters for resolution and noise suppression, the operation information reflecting new products and new functions which the user prefers;

a signal-processing control step for controlling, based on the operation information accepted in the operation-information-acceptance control step, processing on an

input signal in accordance with the new product or a circuit board having the new function of an optimal procedure about image quality and sound quality, which updates an existing product or circuit board having a corresponding function; and

a storage control step for storing, as user preference information to be provided to a provider of an information processing apparatus, the operation information and information concerning the input signal

wherein the optimal procedure about image quality and sound quality is determined based on the user preference information.

18-24. (Canceled)

25. (New) A center processing apparatus for processing user information from a plurality of information processing apparatuses, said center processing apparatus comprising:

an acquiring unit for acquiring user information collected from each of the information processing apparatuses, the user information including operation information from a user for setting parameters for resolution and noise suppression;

an analyzing unit for analyzing the operation information that reflects new products and new functions and obtaining user preference information indicating the new products and the new functions that the user prefers;

a user-information recording unit for recording, in a database, user preference information obtained by the analysis by said analyzing unit;

a selecting unit for selecting, based on the user preference information obtained by the analysis by said analyzing unit, optimal procedures about image quality and sound quality for users of the information processing apparatuses; and

a producing unit for providing the users the new product or a circuit board having the new function of with the optimal procedures about image quality and sound quality selected by said selecting unit to update an existing product or circuit board having a corresponding function.

26. (New) A center processing apparatus according to claim 25, wherein said selecting unit includes a determining unit which calculates a variation in the user information and which determines whether or not the variation is greater than a predetermined threshold, and said selecting unit classifies the users into predetermined groups based on the result of determination by said determination unit.

27. (New) A center processing apparatus according to claim 26, further comprising a procedure recording unit in which the optimal procedures are recorded so as to differ depending on the predetermined groups.

28. (New) A center processing apparatus according to claim 26, wherein said producing unit includes:

a basic part determining unit, based on the result of determination by said determination unit, acquires one procedure from said procedure recording unit, and which, based on the acquired procedure, determines a basic part of a function to be provided to the user; and

a unique part determining unit which, based on the user information analyzed by said analyzing unit, determines a part unique to the user in the function.

29. (New) A center processing apparatus according to claim 26, further comprising a selection updating unit which, based on the user information recorded by said recorder, updates the threshold in said determination unit.

30. (New) An information processing apparatus comprising:

an operation-information accepting unit for accepting operation information from a user for setting parameters for resolution and noise suppression, the operation information reflecting new products and new functions which the user prefers;

a signal-processing unit for processing an input signal in accordance with the new product or a circuit board having the new function of an optimal procedure about image quality and sound quality, which updates an existing product or circuit board having a corresponding function; and

a storage unit for storing, as user preference information to be provided to a provider of said information processing apparatus, the operation information and information concerning the input signal,

wherein the optimal procedure about image quality and sound quality is determined based on the user preference information.

31. (New) An information processing apparatus according to claim 30, wherein said a storage unit stores, as the operation information, the value of a parameter set by the user and a time that the parameter is set by the user.

32. (New) An information processing apparatus according to claim 30, wherein said signal-processing unit performs an image creating process by performing classification adaptive processing on an input information signal.

33. (New) An information processing apparatus according to claim 30, wherein said signal-processing unit is removable from said information processing apparatus.

34. (New) An information management system comprising:

a center processing apparatus for performing user-information analysis; and

a plurality of information processing apparatuses for storing user information;

wherein:

said center processing apparatus comprises:

an acquiring unit for acquiring user information collected from each of the information processing apparatuses, the user information including operation information from a user for setting parameters for resolution and noise suppression;

an analyzing unit for analyzing the operation information that reflects new products and new functions and obtaining user preference information indicating the new products and the new functions that the user prefers;

a user-information recording means for recording, in a database, user preference information obtained by the analysis by said analyzing unit;

a selecting unit for selecting, based on the user preference information obtained by the analysis by said analyzing unit, optimal procedures about image quality and sound quality for users of the information processing apparatuses;

a providing unit for providing the users with the new product or a circuit board having the new function of the optimal procedures about image quality and sound quality selected by said selecting unit to update an existing product or circuit board having a corresponding function; and

each of said information processing apparatuses comprises:

operation-information accepting unit for accepting operation information from the user;

signal processing unit for processing an input signal, based on the operation information accepted by said operation-information accepting unit; and

storage means for storing, as the user information, the operation information and information concerning the input signal.

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